UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,382	11/26/2003	Kenneth N. Bates	51411/JEJ/B768	9673

23363 7590 06/22/2006

CHRISTIE, PARKER & HALE, LLP
PO BOX 7068
PASADENA, CA 91109-7068

EXAMINER	
JAWORSKI, FRANCIS J	

ART UNIT	PAPER NUMBER
3768	

DATE MAILED: 06/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/724,382	BATES ET AL.	
	Examiner	Art Unit	
	Jaworski Francis J.	3768	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *5/15/6,12/20,11/30,9/12/5,11/26/3*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 33* is/are pending in the application.

4a) Of the above claim(s) ___ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15 and 24-33* is/are rejected.

7)☒ Claim(s) *16 - 23* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5/6,12,11,9/5,11/3*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> **(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.**

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3, 9 - 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Branigan et al (US5452717)alone or further in view of Vonesh et al (US5152293) . Branigan et al is directed in Fig. 13 to a fingertip sensor including a sensor assembly 66, 68, a housing for mounting the sensor assembly onto a fingertip and including an inner housing 52 which per Fig. 14 is folded into a clam shape over the finger and an outer housing or finger cot 54 rolled out thereover, as described col. 9 top portion.. [Note that applicants' claims do not distinguish whether the sensor is measuring the finger to which it is attached or being applied for measurement by the finger to which it is

attached.]. Since the inner housing support 52 is separately sterilizable after each use while the cot is disposable, see col. 10 top, the inference is that the cot is separately sterilized. However it would have been inherently obvious to provide sufficient resulting sealant moisture proofing between the two since the intrinsic purpose of a finger cot is that of a barrier.

Whereas the former argument poses that there would be sufficient barrier seal for moisture prevention were the cot for example be dipped in a conventional disinfectant, Vonesh et al on the other hand evidences in col. 5 lies 29 – 31 that finger cot type sensors are also conventionally gas-sterilizable, under which procedure the threshold for moisture barrier formation is significantly lower than for example for an immersion type process. The fingercot portion is wearable on the very fingertip per fig. 6 prior to any folding of 52 against the finger body.

Claims 1 – 3, 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wedel et al ((US5088500) in view of Vonesh et al, alone or further in view of Oakley et al (US5413107).. Wedel et al is applied in a fashion paralleling the rejection immediately above, namely, since Wedel et al finger probe housing 102 is surrounded by a complete rubber glove per col. 3 lines 22 – 24, it would have been inherently obvious that at least some impermeability to liquid disinfectant immersion would result, or in the alternative Vonesh et al is invoked as teaching that the disinfectant may be gaseous thereby placing a minimal moisture barrier requirement on the housing when sterilization is occurring. Vonesh et al additionally teaches that the ultrasound sensor such as in the former may be an array, see col. 3 bottom.

Claims 4 – 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references, Branigan et al or Wedel et al-based, as applied to claim 1 above, and further in view of Al-Ali et al (US6671531). Whereas the former are silent as to flex circuit usage, Al - Ali et al similarly directed to a fingertip sensor of the Branigan et al finger measuring type evidences that a flex circuit having conventiona metal conductors may be made bendable about the finger as in Fig. 2B and having wing and shoulder strain relieving portions as per Fig. 3 would have been well-known as a remote connection means to a fingertip transducer, the flex circuit language appearing in the col. 9 line 46 – 53 discussion therein.

Claims 7, 11 – 15 and 24 – 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claim 4 above, and further in view of Ranalletta (US5630419) or Okubo (US6309358), since whereas the former are silent as to sterilization of a connector portion remote from the transducer assembly, it would have been obvious in view of the latter col. 4 lines 38 – 62 or the Abstract respectively to sterilize the cable and connector portion which egresses away from the transducer assembly in analogous devices such as the ultrasound array catheters which are the latters' genre.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claim 7 above, and further in view of Steuer et al (US4407295) since whereas the former are silent as to wrist attachment, it would have been obvious in view of the latter Figs. 5 – 7 to wrist-secure the remote connector for a fingertip

sensor in order to confine the cabling in a fashion convenient to global use of the sensor hand.

Allowable Subject Matter

Claims 16 – 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication should be directed to Jaworski Francis J. at telephone number 571-272-4738.

FJJ:fjj

052206

Francis J. Jaworski
Primary Examiner